

AMENDMENTS TO THE CLAIMS

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims in the application.

Please amend claims 1-17 as follows:

- 1 1. (Currently Amended) A digital settop box for controlling a digital transport stream,
2 comprising:
3 a data receiving unit being connected to one of a digital subscriber line port and an Ethernet
4 port, said data receiving unit receiving signals from at least one selected from among an
5 asynchronous transfer mode network and an Internet protocol network, the signals corresponding to
6 at least one selected from among asynchronous transfer mode digital broadcasting, asynchronous
7 transfer mode video on demand, Internet protocol mode digital broadcasting, and Internet protocol
8 video on demand, said data receiving unit making an identification of the received signals by
9 determining when the received signals are asynchronous transfer mode data, when the received
10 signals are Internet protocol over asynchronous transfer mode data, and when the received signals
11 are Internet protocol data, said data receiving unit transmitting information corresponding to the
12 received signals in dependence upon the identification;
13 an extracting unit determining whether the transmitted information received from the digital
14 subscriber line port corresponds to the asynchronous transfer mode or Internet protocol mode, when
15 the transmitted information corresponds to ~~a portion of a Moving Picture Experts Group transport~~
16 ~~stream and when the transmitted information corresponds to Internet protocol packet data~~ the

17 ~~asynchronous transfer mode and simultaneously corresponds to portion of a Moving Picture Experts~~
18 ~~Group transport stream, said extracting unit extracting valid cells from asynchronous transfer mode~~
19 ~~cells when the transmitted information includes asynchronous transfer mode cells;~~

20 a transport stream forming unit receiving the extracted valid cells, modifying the extracted
21 valid cells to form modified cells by removing a predetermined byte of head information and
22 overhead information from the extracted valid cells, and by forming one Moving Picture Experts
23 Group transport stream by re_assembling ~~[[four]]~~ the modified cells;

24 a data transforming unit transforming the Moving Picture Experts Group transport stream
25 transmitted from said transport stream forming unit to be displayed by a video display; and

26 a processing unit reassembling asynchronous transfer mode cells, transmitting received data
27 to said data transforming unit.

1 2. (Currently Amended) ~~The apparatus~~ digital settop box of claim 1, with the Moving Picture
2 Experts Group transport stream corresponding to an asynchronous transfer mode Moving Picture
3 Experts Group transport stream.

1 3. (Currently Amended) ~~The apparatus~~ digital settop box of claim 1, with said data receiving
2 unit comprising:

3 a digital subscriber line receiving unit receiving the asynchronous transfer mode data and the
4 Internet protocol data through a digital subscriber line interface; and

5 an Ethernet receiving unit receiving the Internet protocol data through an Ethernet interface.

1 4. (Currently Amended) The ~~apparatus~~digital settop box of claim 1, with said data
2 transforming unit comprising:

3 a decoding unit decoding the Moving Picture Experts Group transport stream transmitted
4 from said transport stream forming unit; and

5 an encoding unit encoding the Moving Picture Experts Group transport stream decoded by
6 said decoding unit to be displayed by the video display.

1 5. (Currently Amended) The ~~apparatus~~digital settop box of claim 4, further comprising:

2 a processing unit receiving the Internet protocol over asynchronous transfer mode data from
3 said digital subscriber line receiving unit, said processing unit receiving the Internet protocol data
4 from said digital subscriber line receiving unit, said processing unit extracting valid cells from the
5 Internet protocol over asynchronous transfer mode data and the Internet protocol data received from
6 said digital subscriber line;

7 said processing unit receiving the Internet protocol data from said Ethernet receiving unit and
8 extracting valid cells from the Internet protocol data received from said Ethernet receiving unit.

1 6. (Currently Amended) The ~~apparatus~~digital settop box of claim 5, further comprising:

2 a control unit determining when the valid cells extracted from the asynchronous transfer
3 mode cells by said extracting unit correspond to at least one selected from among the Moving Picture
4 Experts Group transport stream and general Internet data, determining when the valid cells extracted

5 from the Internet protocol over asynchronous transfer mode data by said processing unit correspond
6 to at least one selected from among the Moving Picture Experts Group transport stream and the
7 general Internet data, and determining when the valid cells extracted from the Internet protocol data
8 by said processing unit correspond to at least one selected from among the Moving Picture Experts
9 Group transport stream and the general Internet data, said control unit re-assembling the cells in
10 dependence upon the determining, said control unit transmitting the Moving Picture Experts Group
11 transport stream to said decoding unit, and said control unit transmitting the general Internet data to
12 said encoding unit.

1 7. (Currently Amended) The ~~apparatus~~digital settop box of claim 6, with the Moving
2 Picture Experts Group transport stream corresponding to an asynchronous transfer mode Moving
3 Picture Experts Group transport stream.

1 8. (Currently Amended) The ~~apparatus~~digital settop box of claim 7, with said data receiving
2 unit comprising:

3 a digital subscriber line receiving unit receiving the asynchronous transfer mode data and the
4 Internet protocol data through a digital subscriber line interface; and

5 an Ethernet receiving unit receiving the Internet protocol data through an Ethernet interface.

1 9. (Currently Amended) The ~~apparatus~~digital settop box of claim 1, further comprising:
2 said processing unit receiving the Internet protocol over asynchronous transfer mode data

from said digital subscriber line receiving unit, said processing unit receiving the Internet protocol data from said digital subscriber line receiving unit, said processing unit extracting valid cells from the Internet protocol over asynchronous transfer mode data and the Internet protocol data received from said digital subscriber line;

said processing unit receiving the Internet protocol data from said Ethernet receiving unit and extracting valid cells from the Internet protocol data received from said Ethernet receiving unit; and

said processing unit reassembling asynchronous transfer mode cells, transmitting received data to said decoding unit of said data transforming unit when incoming data is Moving Picture Experts Group stream, and transmitting and routing reassembled packets to said decoding unit of said data transforming unit when incoming data is general Internet data.

10. (Currently Amended) ~~An apparatus~~ A digital settop box, comprising:

a data receiving unit being connected to at least one of two ports, said data receiving unit receiving signals from at least one source selected from among an asynchronous transfer mode network and an Internet protocol network, the signals corresponding to at least one input received ~~selected~~ from among asynchronous transfer mode digital broadcasting, asynchronous transfer mode video on demand, Internet protocol mode digital broadcasting, and Internet protocol video on demand, said data receiving unit identifying making an identification of the received signals by ~~determining when~~ identifying the received signals ~~[[are]]~~ as asynchronous transfer mode data, ~~when~~ identifying the received signals ~~[[are]]~~ as Internet protocol over asynchronous transfer mode data, and ~~determining when~~ identifying the received signals ~~[[are]]~~ as Internet protocol data, said data receiving

unit transmitting information corresponding to the received signals in dependence upon the
~~identifying~~ identification;

an extracting unit ~~determining~~ making a determination of whether the transmitted information
received from the digital subscriber line port corresponds to an asynchronous transfer mode or to an
Internet protocol mode, when the determination indicates that the transmitted information
corresponds to ~~a portion of a Moving Picture Experts Group transport stream and when the~~
~~transmitted information corresponds to Internet protocol packet data~~ the asynchronous transfer mode
and simultaneously corresponds to portion of a Moving Picture Experts Group transport stream, said
extracting unit extracting valid cells from asynchronous transfer mode cells of the transmitted
information ~~when the transmitted information includes asynchronous transfer mode cells; and~~

a transport stream forming unit receiving the extracted valid cells, modifying the extracted
valid cells to form modified cells[[,]] ~~by the modifying including~~ removing predetermined
information from the extracted valid cells, and by forming [[the]] one Moving Picture Experts Group
transport stream by reassembling the modified cells, and outputting video data to be transformed and
then displayed by a video display.

11. (Currently Amended) ~~The apparatus~~ The digital settop box of claim 10, the
predetermined information including a predetermined byte of head information and overhead
information.

12. (Currently Amended) ~~The apparatus~~ The digital settop box of claim 10, with the at least

two ports including a digital subscriber line port and an Ethernet port.

13. (Currently Amended) ~~The apparatus~~ The digital settop box of claim 12, with said data receiving unit comprising:

a digital subscriber line receiving unit receiving the asynchronous transfer mode data and the Internet protocol data through a digital subscriber line interface; and
an Ethernet receiving unit receiving the Internet protocol data through an Ethernet interface.

14. (Currently Amended) ~~The apparatus~~ The digital settop box of claim 13, further comprising:

a data transforming unit performing transforming after said transport stream forming unit outputs the video data, said data transforming unit comprising:

a decoding unit decoding the Moving Picture Experts Group transport stream transmitted from said transport stream forming unit; and

an encoding unit encoding the Moving Picture Experts Group transport stream decoded by said decoding unit to be displayed by the video display.

15. (Currently Amended) ~~The apparatus~~ The digital settop box of claim 14, further comprising:

a processing unit receiving the Internet protocol over asynchronous transfer mode data from said digital subscriber line receiving unit, said processing unit receiving the Internet protocol data

5 from said digital subscriber line receiving unit, said processing unit extracting valid cells from the
6 Internet protocol over asynchronous transfer mode data and the Internet protocol data received from
7 said digital subscriber line;

8 said processing unit receiving the Internet protocol data from said Ethernet receiving unit and
9 extracting valid cells from the Internet protocol data received from said Ethernet receiving unit.

1 16. (Currently Amended) ~~The apparatus~~ The digital settop box of claim 15, further
2 comprising:

3 a control unit determining when the valid cells extracted from the asynchronous transfer
4 mode cells by said extracting unit correspond to at least one selected from among the Moving Picture
5 Experts Group stream and general Internet data, determining when the valid cells extracted from the
6 Internet protocol over asynchronous transfer mode data by said processing unit correspond to at least
7 one selected from among the Moving Picture Experts Group stream and the general Internet data,
8 and determining when the valid cells extracted from the Internet protocol data by said processing unit
9 correspond to at least one selected from among the Moving Picture Experts Group stream and the
10 general Internet data, said control unit re-assembling the cells in dependence upon the determining,
11 said control unit transmitting the Moving Picture Experts Group stream to said decoding unit, and
12 said control unit transmitting the general Internet data to said encoding unit.

1 17. (Currently Amended) ~~The apparatus~~ The digital settop box of claim 10, further
2 comprising:

3 a data transforming unit performing transforming after said transport stream forming unit
4 outputs the video data, said data transforming unit comprising:

5 a decoding unit decoding the Moving Picture Experts Group transport stream transmitted
6 from said transport stream forming unit; and

7 an encoding unit encoding the Moving Picture Experts Group transport stream decoded by
8 said decoding unit to be displayed by the video display.